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(54) **Antimycotic Cosmetic and Dermatological Preparations Containing Fatty Acid Esters**

(57) Use of one or more fatty acid esters of monohydric and/or polyhydric alcohols as an active antimycotic principle in cosmetic or dermatological preparations.

The present invention relates to preparations with an antimycotic activity that are protected from infestation by mycotic organisms, preferably cosmetic or dermatological preparations in particular.

Fungi (from Latin *fungus*) and mycotic organisms (from Greek *mykes* = fungus) are classified as Eucaryotae or eukaryotes, which are living organisms whose cells (eucytes or eukaryotic cells) have cells that are differentiated from the remaining cytoplasm by a nucleus and a nuclear membrane, in contrast with the so-called prokaryotic cells (prokaryotes). The cell nucleus contains the genetic information stored in chromosomes.

Examples of mycotic organisms include, for example, the yeasts (Protoascomycetes), fungi (Plectomycetes), mildew (Pyrenomycetes), false mildew (Phycomycetes) and of course the club fungi and perfect fungi (Basidiomycetes).

No fungi, not even the Basidiomycetes, are plant organisms, but like plants, they do have a cell wall, vacuoles filled with cell fluid and a plasma flow that can be discerned clearly under a microscope. They do not contain any photosynthetic pigments and they are C-heterotrophic. They grow under aerobic conditions and produce energy by oxidation of organic substances. A few representatives, such as yeasts, however, are facultative anaerobes and are capable of producing energy by fermentation processes.

Dermatomycoses are diseases that penetrate into the skin when exposed to certain species, in particular the dermatophytes. The symptoms of dermatomycoses include, for example, vesicles, exfoliation, rhagades and erosion, usually in combination with itching or allergic eczema.

Dermatomycoses may be subdivided essentially into the following four groups: dermatophytes (e.g., Epidermophyton, Favus, Microsporia, Trichophyton); yeast mycoses (e.g., pityriasis, candidiasis, blastomycosis, Busse-Buschke's disease, torulosis (cryptococcosis), white piedra, torulopsosis, trichosporosis); fungal mycoses (e.g., aspergillosis, cephalosporiosis, phycomycosis, scopulariopsosis), and systemic mycotic infections (e.g., chromomycosis, coccidiomycosis, histoplasmosis).

The pathogens or facultative pathogens include Candida species (e.g., *Candida albicans*) from the yeast group as well as those from the Pityrosporum family. Pityrosporum species, in particular *Pityrosporum ovale*, are responsible for skin conditions such as pityriasis versicolor, seborrhea in the form of seborrhea oleosa and seborrhea sicca, which is manifested in particular as seborrhea capitis (= dandruff), seborrheic eczema and pityrosporum folliculitis.

All areas of the human skin can be infected by dermatomycoses. Dermatophytes infect only skin, hair and nails. However, yeasts may also infect the mucous membranes and internal organs. Systemic mycoses usually involve entire organ systems.

The most common areas of the body to be affected are those where heat and moisture are retained by clothing, jewelry or shoes. Athlete's foot, for example, is one of the best known and widespread dermatomycoses. In addition, mycotic infections of the fingernails and toenails are especially unpleasant.

Finally, preparations such as foods in particular, but also cosmetics and the like can be destroyed by mycotic infections. Therefore, even the products themselves must be protected from infections.

Dermatomycoses are treated with medication or by other methods, such as irradiation with light. Commonly used medications contain salicylic acid, cresol, 1-menthol and other substances, all of which are applied topically and consistently yield good therapeutic results.

Nevertheless, the antimycotic agents known in the past have the disadvantage that they have an unpleasant odor and/or cause additional irritation to the affected areas of skin. In severe cases of dermatomycoses, the medication may even cause pain.

The object of the present invention was thus to make available an antimycotic agent that will not have the disadvantages of the state of the art. In particular, this invention is to make available active ingredients that meet the following conditions:

1) The biological processes of the skin must not be impaired.
2) The active ingredients should not have any strong inherent odor.
3) They should be harmless even in an overdose or when otherwise not used as intended.
4) They should not accumulate on the skin after repeated application.
5) Pathogenic mycotic organisms should be destroyed or at least decimated, but the physiological microflora of the skin should be protected.
6) The active principles should be suitable for easy incorporation into conventional cosmetic or dermatological preparations.
7) The active ingredients should not irritate the skin.
8) Preparations containing these active ingredient should also be protected from infestation.

It has been found, and this forms the solution to all these problems, that using one or more fatty acid esters of monohydric and/or polyhydric alcohols as the antimycotic active principle in cosmetic or dermatological preparations eliminates the disadvantages of the state of the art.

It has been found that the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention prevent the growth of mycotic organisms.

In particular, the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention prevent the development of seborrheic conditions, in particular dandruff, and eliminate pre-existing seborrheic conditions, in particular dandruff.

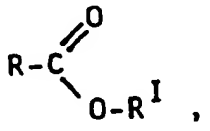
Thus, the present invention also relates to a method of treating seborrheic conditions, in particular dandruff, as well as the prevention of seborrheic conditions such as dandruff in particular.

Finally, it has been found that when the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention are added to organic substances such as cosmetic and/or dermatological preparations in particular, they can prevent these preparations from spoiling due to infestation with mycotic organisms.

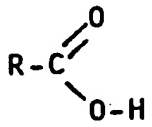
Thus, a method of combatting mycotic organisms is made available according to this invention and is characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols according to this invention, optionally in a suitable cosmetic or dermatological vehicle, are brought in contact with the area contaminated by the mycotic organisms. This invention also makes available a method of protecting

organic products from infestation with mycotic organisms, which is characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols are added in effective amounts to these organic products.

Fatty acid esters in the sense of the present invention are esters of the following general formula:



which are, formally, the esterification products of a fatty acid of the general formula:

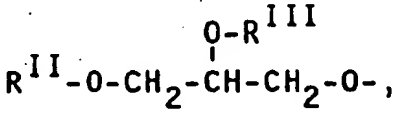


and a one or more of the general formula:

R^I-O-H

where R is a branched or unbranched alkyl group with a chain length of C_1 to C_{25}.
R^I is a branched or unbranched C_1-C_{25} alkyl group, where one or more hydrogen atoms of this alkyl group may have one or more OR^{II} groups as substituents, where this R^{II} group or these R^{II} groups, independently of one another, may be selected from the group consisting of H, branched or unbranched C_{1-25} alkyl and/or branched or unbranched C_{1-25} acyl.

These groups may be selected to advantage such that R is a branched or unbranched alkyl group with a chain length of C_6 to C_{18}; R^I is selected from the group of branched or unbranched C_{1-10} alkyl groups, where one or more hydrogen atoms of this alkyl group may have one or more OR^{II} groups as substituents, where this R^{II} group or these R^{II} groups, independently of one another, may be selected from the group consisting of H, branched or unbranched C_{6-18} alkyl or C_{6-18} acyl. It is especially advantageous for R to be an alkyl group with a chain length of C_{6-18}, R^I is advantageously selected from hexyl and isopropyl as well as the group:



where R^{II} and R^{III}, independently of one another, may be selected from the group consisting of H, branched or unbranched C_{6-18} alkyl or C_{6-18} acyl.

It is especially preferably to select the fatty acid ester from the group consisting of hexyl laurate, isopropyl stearate, glycerol monolaurate, caprylic acid, capric acid triglyceride.

According to this invention, the fatty acid esters of monohydric and/or polyhydric alcohols are preferably used in cosmetic or dermatological preparations in the amount of 0.01 to 20.0 percent by weight, based on the total weight of the composition. It is especially preferable for the compositions to contain 0.02 to 5.0 percent by weight of the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention, especially 0.5 to 3.0 percent by weight, each based on the total weight of the composition.

The fatty acid esters of monohydric and/or polyhydric alcohols according to this invention can be incorporated easily into the conventional cosmetic or dermatological preparations, especially pump sprays, aerosol sprays, creams, ointments, tinctures, lotions, nail care products (e.g., nail polish, polish remover, nail creams) and the like.

It is especially preferable to incorporate the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention into special dandruff shampoos.

Therefore, this invention relates to the use of fatty acid esters of monohydric and/or polyhydric alcohols as an active principle against dandruff in cosmetic or dermatological preparations according to this invention.

Furthermore, this invention also relates to a method of combatting dandruff and is characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols are brought in contact with the seborrheic area of the skin, optionally in a suitable cosmetic or dermatological vehicle.

It is also possible and optionally advantageous to combine the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention with other active ingredients, e.g., with other antimycotic active ingredients.

It is advantageous to buffer the compositions according to this invention. A pH in the range of 3.5 to 9.0 is especially advantageous. It is especially advantageous for the pH to be in the range of 4.0 to 6.0.

The cosmetic and/or dermatological preparations according to this invention may have the usual formulations and are used to treat the skin and/or hair in the sense of a dermatological treatment or a treatment in the sense of skin care cosmetics. However, they may also be used in decorative cosmetics.

The cosmetic and/or dermatological preparations according to this invention are applied to the skin and/or hair in a sufficient amount in the manner conventional with cosmetics and dermatological preparations.

Such cosmetic and dermatological preparations which are in the form of a sun screen are especially advantageous. These also preferably contain at least one UVA filter and/or at least one UVB filter and/or at least one inorganic pigment.

Cosmetic preparations according to this invention for protecting the skin from UV rays may be in various

Cosmetic preparations according to this invention for protecting the skin from UV rays may be in various forms such as those generally used for this type of preparation. For example, they may be in the form of a solution, an emulsion of the water-in-oil (W/O) type or the oil-in-water (O/W) type or multiple emulsions, e.g., of the water-in-oil-in-water (W/O/W) type, a gel, a hydrodispersion, a solid stick or an aerosol.

The cosmetic preparations according to this invention may contain cosmetic additives, such as those usually used in such preparations, e.g., preservatives, bactericides, perfumes, agents for preventing foaming, dyes, pigments having a coloring effect, thickeners, surface-active substances, emulsifiers, softening substances, moisturizing and/or moisture retaining substances, fats, oils, waxes or other conventional components of a cosmetic formulation such as alcohols, polyols, polymers, foam stabilizers, electrolytes, organic solvents or silicone derivatives.

If the cosmetic or dermatological preparation is a solution or a lotion, the following solvents may be used:

- water or aqueous solutions;
- oils such as triglycerides of capric acid or caprylic acid, but preferably castor oil;
- fats, waxes and other natural and synthetic fat substances, preferably the esters of fatty acids with alcohols with a low number of carbon atoms, e.g., isopropanol, propylene glycol or glycerol, or esters of fatty alcohols with alkanoic acids with a low number of carbon atoms or with fatty acids;
- alcohols, diols or polyols with a low number of carbon atoms, as well as their ethers, preferably ethanol, isopropanol, propylene glycol, glycerol, ethylene glycol, ethylene glycol monoethyl or monobutyl ether, propylene glycol monomethyl ether, monoethyl ether or monobutyl ether, diethylene glycol monomethyl ether or monoethyl ether and similar products.

In particular, mixtures of the solvents listed above are used. In the case of alcoholic solvents, water may be another ingredient.

Emulsions according to this invention, e.g., in the form of a sun screen cream, a sun screen lotion or a sun screen liquid are advantageous and contain, for example, the fats, oils, waxes and other fatty substances listed above as well as water and an emulsifier, such as that usually used for such a type of formulation.

Gels according to this invention usually contain alcohols with a low number of carbon atoms, e.g., ethanol, isopropanol, 1,2-propanediol, glycerol and water or an oil as listed above in the presence of a thickener which is preferably silicon dioxide or an aluminum silicate in the case of the oily-alcoholic gels or is preferably a polyacrylate in the case of alcoholic or aqueous alcoholic gels.

Solid sticks according to this invention may contain, for example, natural or synthetic waxes, fatty alcohols or fatty acid esters. Lipstick with skin care properties is preferred.

Propellants suitable for use in the cosmetic or dermatological preparations according to this invention so that they can be sprayed from aerosol containers include the usual known volatile liquefied propellants, e.g., hydrocarbons (propane, butane, isobutane), which may be used alone or in mixture. Compressed air can also be used to advantage.

Of course those skilled in the art will know that there are also non-toxic propellant gases which would be fundamentally suitable for use according to the present invention but which should be eliminated because of harmful effects on the environment or other peripheral circumstances, in particular fluorocarbons and chlorofluorocarbons (CFCs).

The preparations according to this invention may preferably also contain substances that absorb UV radiation in the UVB range, where the total amount of the filter substances is 0.1 percent by weight to 30 percent by weight, preferably 0.5 to 10 percent by weight, in particular 1 to 6 percent by weight, based on the total weight of the preparation in order to make available cosmetic preparations which protect the skin from the entire range of ultraviolet radiation. They may also be used as sun screens.

Cosmetic preparations according to the present invention may also contain inorganic pigments, which are generally used in cosmetics to protect the skin from UV radiation. These are the oxides of titanium, zinc, iron, zirconium, silicon, manganese, aluminum, cerium and mixtures thereof, as well as modifications in which the oxides are the active agents. These are especially preferably pigments based on titanium dioxide.

The cosmetic preparations according to this invention for hair care include, for example, shampoos and preparations that are applied when rinsing the hair before or after shampooing or before or after a permanent wave treatment, before or after dyeing or coloring or bleaching the hair, preparations for blow drying or setting hair, preparations for dyeing or bleaching hair, hair setting and treatment lotions, hair spray or permanent wave solutions. These cosmetic preparations according to this invention contain active ingredients and additives such as those generally used for this type of preparations for hair care and hair treatment. Conventional additives include preservatives, surface-active substances, foam suppressant substances, emulsifiers, thickeners, fats, oils, waxes, organic solvents, bactericides, perfumes, dyes or pigments whose function is to color the hair or the preparation itself, or electrolytes, preparations to prevent a buildup of oil on the hair.

Cosmetic preparations which are shampoos or bath or shower preparations preferably contain at least one anionic, nonionic or amphoteric surface-active substance or mixtures thereof, at least one fatty acid ester according to this invention in an aqueous medium and additives such as those usually used. The surface-active substance may be used in a concentration between 1 and 50 percent by weight in the shampoo or bath or shower preparation.

If the cosmetic or dermatological preparation is in the form of a lotion which is rinsed out and is used, for example, before or after bleaching, before or after shampooing, between two steps in shampooing, before or after a permanent wave treatment, these may be aqueous or aqueous alcoholic solutions which optionally contain surface-active substances, preferably nonionic or cationic surface-active substances whose concentration may be between 0.1 and 10 percent by weight, preferably between 0.2 and 5 percent by weight. This cosmetic or dermatological preparation may also be an aerosol with the additives conventionally used for this purpose.

A cosmetic preparation in the form of a lotion which is not rinsed out, in particular a lotion for setting the hair, a lotion which is used in blow drying the hair, a hair setting and treating solution is generally an aqueous, alcoholic or aqueous alcoholic solution and contains at least one cationic, anionic, nonionic or amphoteric polymer or mixtures thereof, as well as at least one fatty acid ester according to this invention. The amount of polymer used is between 0.1 and 10 percent by weight, preferably between 0.1 and 3 percent by weight.

Cosmetic and dermatological preparations for treatment and care of the hair, containing at least one fatty acid ester according to this invention may be in the form of emulsions of the nonionic or anionic type. In addition to water, the nonionic emulsions contain oils or fatty alcohols which may also be polyethoxylated or polypropoxylated, or they may be mixtures of the two organic components. These emulsions are preferably of the type of a soap and contain at least one fatty acid ester according to this invention.

Cosmetic and dermatological preparations for treatment and care of hair may be in the form of gels which contain, in addition to at least one fatty acid ester of monohydric and/or polyhydric alcohols and the solvents generally used for this purpose, organic thickeners, e.g., gum arabic, xanthan gum, sodium alginate, cellulose derivatives, preferably methyl cellulose, hydroxy methyl cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methyl cellulose or inorganic thickeners, e.g., aluminum silicates such as bentonites or a mixture of polyethylene glycol and polyethylene glycol stearate or distearate. The thickener is present in the gel in an amount between, for example, 0.1 and 30 percent by weight, preferably between 0.5 and 15 percent by weight.

Preferably the amount of the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention in a preparation intended for use on hair will be 0.01 to 10 percent by weight, in particular 0.5 to 5 percent by weight, based on the total weight of the preparation.

The surprising antimycotic effect of the fatty acid esters according to this invention is to be demonstrated on the basis of the following experiments:

Experiment 1

Test solutions:

TY medium	10 g Trypton + 5 g yeast extract + 10 g NaCl dissolved in 1000 mL H_2O, buffered to a pH of 7.4, autoclaved
Test compound 1:	hexyl laurate
Test compound 2:	isopropyl stearate
Test compound 3:	caprylic acid/capric acid triglyceride
Test compound 4:	glyceryl laurate

Pityrosporum ovale from three patients with pityrosporum folliculitis, pityriasis versicolor or seborrheic eczema was suspended in a mixture of 50% TY medium, 30% olive oil and 20% Tween 80. The three different yeast strains were spread out uniformly in three parallel batches on a selective agar plate for pathogenic fungi (Merck AG, Darmstadt). With the help of sterile cork punches, several circular recesses were punched in each plate. Then 25 µL of the test solutions were placed in each recess with a diameter of 5 mm. The test solutions were 0.5%, 1.0%, 2.5%, 5.0% and 10.0% solutions of the test substances in ethanol.

After incubating for three hours at 37°C, the evaporated solvent was replaced by 25 µL jojoba oil, and the plates were then incubated for three days while maintaining the growth conditions. During this period of time, the test substances diffused into the culture media surrounding each recess.

After three days of incubation, test compounds with an antimycotic effect would show a definite concentric zone of inhibition around the recesses. The size of these zones of inhibition, as shown in Table 1, is a measure of the antimycotic efficacy of the test compounds at a comparable substance concentration.

Table 1

	Average diameter of the zones of inhibition (mm)			
Concentration	0.5%	1.0%	5.0%	10.0%
Test solution 1	14	15.5	18.0	20.7
Test solution 1	10.7	14.0	18.7	20.7
Test solution 1	9.0	9.0	15.0	17.3
Test solution 1	11.0	14.0	16.5	16.5

The following examples are presented to illustrate the present invention without limiting it in any way.

Example 1
Sun screen cream

	percent by weight (wt%)
Glyceryl cocoate + hydrogenated coconut oil ceteareth 25 (Softisan 601)	35.00
Caprylic acid / capric acid triglyceride (Miglyol 812)	7.00
Glyceryl stearate (Imwitor 960)	5.00
Caprylic acid diethylamide (Repellent 790)	3.00
Dihydroxyacetone	0.50
Phenylbenzimidazole sulfonic acid (Eusolex 232)	4.00
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

Example 2
Day cream

	percent by weight (wt%)
Glyceryl stearate (Imwitor)	15.00
Caprylic acid / capric acid triglyceride (Miglyol 812)	15.00
Paraffin oil DAB 9 [German Pharmacopoeia, 9th edition]	5.00
Glycerol-polyethylene glycol ricinoleate (Cremophor EL)	2.00
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

Example 3
Collagen cream

	percent by weight (wt%)
Glyceryl stearate (Imwitor)	9.00
Paraffin oil DAB 9 [German Pharmacopoeia, 9th edition]	9.00
Isopropyl myristate	5.00
Cetyl alcohol	1.00
Stearic acid	5.00
Caprylic acid / capric acid triglyceride (Miglyol 812)	5.00
Sorbitol solution 70%	5.00
Triethanolamine	0.90
Collagen CLR	5.00
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

Example 4
O/W diglycerol cream

Phase A	percent by weight (wt%)
Glyceryl stearate (Imwitor 900)	9.50
Cetearyl alcohol (Lanette O)	1.60
Cetearyl isethionate (Cetiol SN)	4.00
Cetyl acetate + acetylated lanolin alcohol (Acetulan)	2.40
Calendula oil	1.60
Isopropyl stearate	0.75
Glycerol monolaurate	0.75

Phase B	
Diglycerol	8.00
Glycerol	8.00
Carbomer/polyacrylate (Carbopol 940)	0.12
Triethanolamine 98%	0.22
Chamomile extract	1.00
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

Phases A and B are heated separately to 60°C, combined while stirring and then cooled slowly to room temperature.

Example 5
Bath oil, liquid

	percent by weight (wt%)
Oleth-5 (Eumulgin 0 5)	10.00
Lauric acid hexyl ester (Cetiol A)	40.00
Coco fatty acid diethanolamide (Comperlan)	10.00
Caprylic acid/capric acid triglyceride (Myritol 318)	10.00
Paraffin oil DAB 9 [German Pharmacopoeia, 9th edition]	25.00
Perfume	5.00

Example 6
Herbal bath oil

	percent by weight (wt%)
Fatty alcohol polyether (Aethoxal B)	52.00
Laureth-2 (Dehydol LS2)	10.00
Lauric acid hexyl ester (Cetiol A)	15.00
Caprylic acid/capric acid triglyceride (Myritol 318)	20.00
Rosemary oil	3.00

Example 7
Dandruff shampoo, clear

	percent by weight (wt%)
Allantoin	0.20
Sodium alkyl polyglycol ether sulfate (Genapol LRO liquid)	25.00
Sodium alkyl polyglycol ether sulfate (Genapol AMG)	10.00
Caprylic acid / capric acid triglyceride (Miglyol 812)	10.00
NaCl	1.10
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

Example 8
Dandruff shampoo, pearlescent

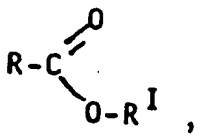
	percent by weight (wt%)
Sodium alkyl polyglycol ether sulfate (Genapol LRO liquid)	40.00
Sodium alkyl polyglycol ether sulfate (Genapol PGL)	4.00
Fatty acid alkylol amide polyglycol ether (Genagen CAB)	10.00
Caprylic acid / capric acid triglyceride (Miglyol 318)	10.00
NaCl	0.50
Preservatives, perfume, stabilizers, etc.	as desired
Water	to 100.00

The formulations according to this invention as described in Examples 1 through 8 are excellently protected from infestation by mycotic organisms. The dandruff shampoos according to Examples 7 and 8 are characterized by an excellent effect against dandruff.

Patent Claims

1. Use of one or more fatty acid esters of monohydric and/or polyhydric alcohols as the antimycotic active principle in cosmetic or dermatological preparations.

2. Use according to Claim 1, characterized in that the fatty acid esters are selected from the group of compounds of the general formula:

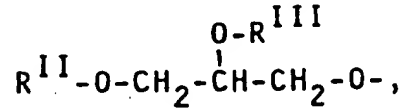


where
R is a branched or unbranched alkyl group with a chain length of C_1 to C_{25},
R^I is a branched or unbranched C_1-C_{25} alkyl group, where one or more hydrogen atoms of this alkyl group may have one or more R^{II} groups as substituents, and where this R^{II} group or these R^{II} groups, independently of one another, may be selected from the group consisting of H, branched or unbranched C_{1-25} alkyl or C_{1-25} acyl.

3. Use according to Claim 2, characterized in that the fatty acid esters of monohydric and/or polyhydric alcohols according to this invention are selected so that
R is a branched or unbranched alkyl group with a chain length of C_6 to C_{18},
R^I is selected from the group of branched or unbranched C_{1-10} alkyl groups, where one or

more hydrogen atoms of this alkyl group may have one or more R^{II} groups as substituents, where this R^{II} group or these R^{II} groups, independently of one another, may be selected from H, branched or unbranched C_{6-18} alkyl or C_{6-18} acyl.

4. Use according to Claim 2, characterized in that
R is an alkyl group with a chain length of C_{6-18},
R^{I} is selected from hexyl and isopropyl as well as the group:



where R^{II} and R^{III}, independently of one another, are selected from the group consisting of H, branched or unbranched C_{6-18} alkyl or C_{6-18} acyl.

5. Use according to Claim 1, characterized in that the fatty acid esters are selected from the group consisting of hexyl laurate, isopropyl stearate, glycerol monolaurate, caprylic acid/capric acid triglyceride.

6. Use according to Claim 1, characterized in that the fatty acid esters of monohydric and/or polyhydric alcohols are used in cosmetic or dermatological preparations in an amount of 0.01 to 20.0 percent by weight, preferably in an amount of 0.02 to 5.0 percent by weight, especially preferably in an amount of 0.5 to 3.0 percent by weight, each based on the total weight of the composition.

7. Use of one or more fatty acid esters of monohydric and/or polyhydric alcohols as the active principle against dandruff in cosmetic or dermatological preparations.

8. Method of combatting mycotic organisms, characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols, optionally in a suitable cosmetic or dermatological vehicle, is brought in contact with the area contaminated with the mycotic organisms.

9. Method of protecting organic products from infestation by mycotic organisms, characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols are added to these organic products in effective amounts.

10. Method of combatting dandruff, characterized in that one or more fatty acid esters of monohydric and/or polyhydric alcohols, optionally in a suitable cosmetic or dermatological vehicle, is brought in contact with the seborrheic area.